

The Growth of Official Military Cinema in the United States, 1917-1918

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Among the belligerent countries in World War I, the development of propaganda directed for the general public, including cinema, generally was accompanied by some sort of wrangling about who would ultimately be responsible for it, the military or the civilian branches of the government. The United States was no exception, but the outcome was in fact quite different from the results in Germany, England or France. In the United States, the Signal Corps of the United States Army had authority and responsibility for motion pictures. How this came about is something of an anomaly.

The U.S. Signal Corps Goes to War

The Signal Corps was originally founded to deal with the new military disciplines of semaphoring and telegraphy in the Civil War. By 1860, the Army realized that battlefields had become so large that some kind of communication between various units and headquarters was absolutely necessary, and by September 1862, Signal Corps units were in action at the Battle of Antietam. So the core mission of the Signal Corps could be said to be battlefield communication. Photography could be considered to fit more logically under army intelligence than communications, but in fact there was a kind of rough logic to it. The Signal Corps was responsible for signals intelligence on the battlefield, so it was involved in army intelligence, especially on the tactical level. Perhaps because of this, the Signal Corps was given authority over photography in 1881, and in 1896 published its first manual of photography. The first roll-film still cameras were just being produced that were much more compact and suitable for outdoor photography under difficult conditions. In 1898, war with Spain broke out and the Corps sent cameramen to Cuba who would take the first military pictures from a balloon. There is no definite documentation of when the U.S. Signal Corps first used a movie camera but the first reference is to moving pictures of a Wright brothers' test flight in 1909.

In 1916 when General Pershing started his expedition in Mexico to capture Pancho Villa, the Signal Corps was actually much smaller than during the recent war with Spain in 1898. Like most units in the American Army, the Signal Corps was hardly prepared for war when it was declared in April 1917. When on 21 July 1917, a photographic laboratory was secured from the Eclair Company at St. Ouen near Paris, the staff consisted of just one officer and one enlisted soldier. ¹ Three months later eight more military photographers reported from America at St. Quen, but evidently this didn't help much to solve the problems of the Signal Corps laboratory that was seriously understaffed at this stage of the war.

So an expansion and development of the photographic unit of the Signal Corps was to be expected. But the Wilson administration made a move that changed the whole approach to photography by the Army. On 13 April 1917, only a week after the entry of the United States into the war, President Woodrow Wilson established the Committee on Public Information (CPI):

Executive Order 2594 – Creating Committee on Public Information
April 13, 1917

I hereby create a Committee on Public Information, to be composed of the Secretary of State, the Secretary of War, the Secretary of the Navy and a civilian who will be charged with the executive direction of the Committee.

As Civilian Chairman of this Committee, I appoint Mr. George Creel. The Secretary of State, the Secretary of War, and the Secretary of the Navy are authorized each to detail an officer or officers to the work of the committee.

Woodrow Wilson

The White House

April 13, 1917 ²

The primary purpose of the CPI was to reorganize and channel all government information in the American media. Both censorship and publicity would be combined within one single governmental agency, with two mutually antagonistic aims. This caused the same sort of bureaucratic log jam

exhibited between the German General Staff and the German Foreign Office in 1915. It was a difficult, if not impossible task.

The Committee on Public Information (CPI)

The creation of the CPI was in response to several developments. Many newspaper editors had complained about insufficient reliable and useful war news released by the government. In addition pressure was rising to implement a nationwide censorship policy on both a local and state level. It wasn't until June 1917 that the Espionage Act was passed by the U.S. Congress. This Act provided the legal basis for wartime political censorship in the United States. The State Department in particular was most anxious to set up a system that would control all media publications that might benefit the enemy and harm national interests. Publicity, including film publicity, was certainly not mentioned in the directive establishing it. However what happened was that the CPI became de facto in charge of film propaganda of the United States, at home or abroad.

George Creel, the civilian chairman for the CPI, was a journalist from Denver, Colorado, who had been extremely supportive of the Democratic administration. With abundant energy and enthusiasm, Creel began setting up the CPI as a tool for what he described as "The Greatest Adventure in Advertising." As Creel saw it, the American intervention in the war had to be communicated both within the United States and abroad as a straightforward publicity proposition, a mass media campaign on a scale unequaled in history. Creel was a firm believer in public relations; positive campaigning rather than direct governmental control of the media was his magic formula. In his apologia *How We Advertised America*, Creel summarized his personal feelings succinctly: "In no degree was the Committee an agency

of censorship, a machinery of concealment or repression. Its emphasis throughout was on the open and the positive.”³ Which was simply not true.

When on 21 July 1917 Secretary of War Newton Baker decided to produce a pictorial history of America’s involvement in the Great War, he gave the task to the United States Signal Corps. The original order establishing the military motion picture units was the result of a direct order from General John J. Pershing, head of the American Expeditionary Force, in August 1917, after the entry of the United States into the First World War. His order established combat photography units both for still pictures and motion pictures. “The Signal Corps function was to maintain the historical files of still and motion pictures, produce training films, and manage ground photography not already under another services control.”⁴ Whether Pershing in his order meant the Signal Corps to establish a historical archive or produce propaganda is not clear, but this is in fact what came about. According to the Official Signal Corps report of 1920,

Upon the entry of the United States in the World War, April 6 1917, the Signal Corps was called to enter new fields of work not attempted by armies in previous wars. Military photography was among the new work allotted to the Signal Corps, which established the departments for aerial and land photography in the Army. The General Staff directed that both motion and still pictures be made of all activities of the Army. The pictures were to be used for propaganda, scientific research, identification, for military aerial reconnaissance purposes but principally for a graphic history of the world war.”⁵

However, official reports, especially drafted three years after the fact, often do not tell the whole story. At the beginning of the war, photography played a minor role in Signal Corps operations, being chiefly considered an aid to aerial reconnaissance and artillery spotting. As the official historian Dulany Terrett noted: “Photography was limited to the indirect forms of communication, and for military purposes these were associated with minor functions or with major functions in a minor way. Publicity and record were the minor, intelligence and training the major.”⁶

The solution to the Army's reluctance to generate publicity was primarily solved by the CPI, which promoted its official war pictures with specially arranged publicity campaigns and premiere exhibitions. Signal Corps soldiers were assigned to companies spread across the entire United States with most of them involved in telegraphic communications. The involvement by the CPI from the beginning of America's entry into the war meant that there would be an emphasis on propaganda, even if this was emphatically not what the Army had had in mind.

It is readily apparent that what John J. Pershing, perhaps under orders from Newton Baker and prodding from the CPI, expected from motion pictures was far more extensive than what the regular army had in mind and far more realistic. America already had a burgeoning film industry, and four years after *Birth of a Nation*, it was clear that movies, and especially movies about war, were big business. Donald Thompson's films in France and Russia, Albert K. Dawson's films on Germany and the Austrians, Geoffrey Malins' *Battle of the Somme* had already played in the United States and had done good business. Every week, the newsreels, including some from Germany, England and France, which were shown in the United States, were displaying the power of the moving image to sway the general public. And the United States military already had numerous examples showing how moving pictures could sway the general public.

The other military branches of the armed forces were also interested in photography and motion pictures. The Marine Corps was interested in motion pictures for publicity purposes even before the United States Army, and if the Army was primarily interested in photography and cinematography for tactical intelligence purposes, the Marine Corps was already thinking about these media in terms of propaganda and recruiting. As described by Robert Lindsay in his book on the history of Marine Corps publicity, America had only been in the war against Germany for three weeks, but the Marine Corps was already well prepared for the PR job that the war demanded.⁷ Taking the utmost advantage of its separate corps identity, the Publicity Bureau had everything set in place. One officer and twenty-seven

Marines managed six principal departments, including a press office. In order to ramp up the photographic staff of the Marine Corps Publicity Bureau it was decided to hire professional photographers who would work with still camera as well with movie equipment. So when the first detachment of Marines landed at St. Nazaire, France on 27 June 1917, two month before the Army had even created a photographic Division, a Marine cameraman, Quartermaster Sergeant Leon H. Caverly, landed with them. Caverly, and the Marine cameramen in France, were to shoot some of the best footage made by Americans in the war.⁸ This raises an interesting question about the extent of control of the Signal Corps over the U. S. Marines. The Marine Corps fell under the authority of the Secretary of the Navy, not that of the Secretary of War, which maintained civilian control of the Army. So one would think that the Marine photographs and motion pictures did not belong in U. S. Army Signal Corps files at all. The answer is that the Secretary of War officially “borrowed” the Marine units that saw combat in France to the Army, which meant that the Signal Corps had access to the Marine material.⁹

The United States Navy was also interested in photography in World War One, although, similarly to the original interests of the Army, its interest remained largely in photographic reconnaissance, especially aerial photography. In fact, the first photographic unit of the Navy was established at Pensacola, Florida, still the center of naval air activities. The father of naval photography was Walter L. Richardson, originally a Navy cook but who was interested in mechanical devices such as cameras. He transferred to the air arm, became an officer and singlehandedly created the Photographic Unit.¹⁰ However, at least in World War I, there was no major expansion of naval photography into a more general sphere.

The Birth of the Signal Corps Photographic Division (1917)

In August 1917 official announcement was made of a photographic division headquartered in Washington, DC:

WAR DEPARTMENT
Office of the Chief Signal Officer
Washington
Office Memorandum No. 83.

August 2, 1917

A photographic Division of this office is hereby created.

Major James Barnes, Signal Corps, U.S.R. will assume charge of the Photographic Division.

The following officers of the Signal Corps have been detailed to this Division:--

Major James Barnes, Signal Corps, U.S.R.
Captain Charles F. Betz, Signal Corps, U.S.R.
First Lieut. Edward J. Steichen, Signal Corps, U.S.R.
First Lieut. Albert K. Dawson, Signal Corps, U.S.R.
First Lieut. Edwin F. Weigle, Signal Corps, U.S.R.

The Photographic Division will take charge of all matters of photography pertaining to the Signal Corps, in connection with both aviation and the general photography of all military operations.

By direction of Chief Signal Officer,

C. McK. Saltzman
Colonel, Signal Corps. ¹¹



Figure 1: The original team of the U.S. Signal Corps Photographic Division. From left to right: Cpt. Charles F. Betz, Lt. Edward J. Steichen, Lt. Edwin F. Weigle, Major James Barnes and Lt. Albert K. Dawson. Copied from *Deutsch-Amerika*, 15 September 1917

The memorandum is significant. While the Army might have had aerial photography primarily in mind, Barnes, an inexperienced reserve major, was being made head of all photographic operations carried on by the military. While the Army may not have realized the importance of this, it would have a great effect on all photographic operations, including cinematic ones, for the rest of the war. The list of personnel in itself suggests how far the military film effort would be under the thumb of civilians who had been cinematographers or in the case of Steichen, world-famous photographic artists. It would be a far different military cinema than that originally envisioned by the Signal Corps.

James Barnes was far from a career military officer. A Princeton graduate, author, traveler and war correspondent, he had covered the Boer War, made hunting and adventure films in Africa, and appeared to know everybody important. He was independently wealthy. He saw early that the United States would get into World War I, and so obtained a reserve commission at the Army training school at Plattsburg New York in 1915. But he saw the crying need for an air service, and at Princeton University, his former alma mater, he formed a Princeton Flying Club. He got interested in aerial photography during his time at Princeton and made some photographs that he later showed to the Army, who were evidently interested. On this slim basis, Barnes, who as noted above had already received a commission in the Army, was made chief of the Photographic Division. Steichen was an honored artist and photographer who had almost single handedly created the photographic movement known as the Photo Secession. Weigle was the famous photographer and cinematographer for the *Chicago Tribune*, had covered the fighting in Vera Cruz in 1914 and made a series of films covering the war in Belgium and Germany. Albert K. Dawson had similarly been making movies in Germany all through 1915. These were highly competent civilians, and the mark they left on the Signal Corps was indelible. Barnes commented on his introduction to the military in August of 1917:

When I reported at Washington and talked with several of the officers of the Signal Corps, so surprised was I at finding matters in confusion that the traditional stroke of the feather would have laid me flat. Air photography had been touched upon in the most desultory fashion; no

photographic division had been formed; no committee had been appointed to investigate the latest developments in regard to this particular branch. The War Department and the Signal Corps were burdened with the great problems of organization; with the questions of supply, of material, of personnel, of aviation training, and the still more difficult one of the production of planes confronting them, photographic observations had been regarded as a small side issue. At the end of the fourth month of the war [for the Americans] there were in existence no complete files of papers or correspondence pertaining to it.¹²

Under these circumstances, the expansion of the Signal Corps into film coverage of the war was slow and painful. It was almost a full year before the Signal Corps was creating documentary war films on a regular basis. While the Signal Corps planned to place a four-man photographic unit (consisting of a still photographer, a cinematographer and two assistants) with each American division, it failed to provide clear instructions on what sort of film to shoot to the first cameramen sent to Europe.¹³ Lieutenant Edwin H. Cooper, photographic officer for the 26th "Yankee" Division, noted: "We were sent out in the field with absolutely no instructions and had to use our own judgment on what to photograph."¹⁴ In a letter from the front dated 22 April 1918, he also complained about a shortage of men for his photographic team. Reinforcements were coming in slow, Cooper said, and as a result he had been making all of the films himself as well as most of the still pictures.¹⁵

The development of these photographic field units was also seriously hindered by the Corps' initial decision to use cameramen with no photographic experience whatsoever. The general idea was these men would make better soldiers because they first were drilled and trained to conform to the military way of doing things. But there was no guarantee that under such circumstances cameramen sent to the front would be the best or even good. On the contrary such an attitude probably made for the worst kind of cameramen imaginable. And this is when the CPI stepped in. It altered the Signal Corps' policy of only taking on photographers and cinematographers with no experience. Following an investigation by CPI officials Kendall Banning and Lawrence Rubel, civilian photographers with a proven record in the film business were commissioned into the Signal Corps.

The film unit of the CPI did not really become important until Creel appointed Charles Hart to run it. Hart had no motion picture experience, and had been the editor of *Hearst's Magazine*. According to Louis Pizzitola, "Hart made the film division so strong, that many commercial filmmakers feared he was working with Creel to encroach, and possibly take over their industry." Pizzitola also makes a strong case that Creel, Hart and others gave Hearst many unfair advantages in obtaining the best Signal Corps film, and even managed to establish their own cabal of Hearst cameramen in France.¹⁶

And so, in a rather ungainly fashion, military photography in the United States was divided between two entities, the CPI and the Signal Corps. They were of course widely divergent: the Signal Corps was a branch of the United States Army while the CPI was an entity of the Executive Branch of the civilian government formed by Woodrow Wilson. But they twisted around each other. Secretary of War Newton Baker was head of the Council of National Defense and thus worked closely with the CPI. The CPI was in a position to dictate policy to the Signal Corps, which, as already noted, originally had little interest in the production of propaganda and far more in the production of training films. Nevertheless, most of the war footage that was shown to the American audience in newsreels were shot by Signal Corps photographers.¹⁷

Training the Art of War Photography

As the CPI concluded, not every cameraman was suited for this kind of work. Press photographers who could work independently and had a feeling for shooting the right kind of film scene that was attractive to a wide audience were considered most suitable for recruitment into the Corps. As more of these professional cameramen joined as the Signal Corps ramped up its photographic division, keeping discipline sometimes proved to be a problem. As civilians, many of these cameramen were used to working independently which made it very difficult for the drill sergeants to make soldiers of them. One

of them was George Marshall, film director who had a prior commission with the Coastal Artillery, who had to drill a platoon with a number of remarkable press photographers. As he mentioned in an interview with Kevin Brownlow: “It was useless. You couldn’t beat them down. I had all these characters, like those fabulous New York cameramen from Hearst News; they’d never taken orders in their life. I remember one of them coming out on parade with his shirt-tail sticking out. I said ‘You can clean up the barracks this morning’. He wanted to shoot me. ‘Don’t tell me what to do!’ he said.”¹⁸



Figure 2: Lt. Edwin H. Cooper, photographic officer 26st Division, filming war near Château-Thierry, July 1918.

Two of his cameramen got wounded during this attack. Signal Corps photo courtesy National Archives.

After enlisting, the cameramen began their photographic training. At first they seem to have been trained at Washington Barracks by Lt. Albert K. Dawson who was in charge of the photographic laboratory at this location and had made movies with the German and Austro-Hungarian armies before America entered World War I. In January 1918, a professional school of land photography opened at Columbia University in New York City. Two months later a special school for aerial photography was started in the Kodak plant at Rochester, New York. All recruits did basic training which lasted five weeks and took place at a training ground at Fort Sill, Oklahoma. "They marched. They hiked. They swept floors. And they kitchen polished. It was a process of hardening," Earl Theissen recalled in a brief historical sketch on the Signal Corps during World War I.¹⁹ All together, an estimated 2,500 American soldiers completed their photographic training during World War I, although most of them would arrive too late in France to see any real action.

Despite basic training the Signal Corps photographers remained a special outfit with its own unique brand and character. Although a photographic unit was attached to each American Division stationed in France, most of the cameramen worked pretty much on their own. Apart from these units was also a mobile division of photographers attached to each American army corps. These cameramen moved around in the war zone quite freely and for most of the time recorded events according to their own judgment. Ernest Schoedsack remembered: "I had no directive, no passes. They didn't give me a gas mask or a helmet, although I did get a .45 and some ammunition."²⁰

Facilities for the cameramen did improve during the war. Because it was expected that most of the films needed to be developed quickly, the Signal Corps introduced special trucks with darkrooms that were stationed in close proximity to the firing line. This was particularly useful for the processing of aerial pictures. Most of the motion picture films were processed at the Signal Corps laboratory near Paris. From February 1918 this facility was located in the plant of Pathé in Vincennes. The screening of all footage ran according to a strict procedure. Each film reel was monitored by a Signal Corps officer for

any information that could be useful to the enemy. Next a duplicate negative was made which was sent to the War College in Washington, DC. This footage was screened again by military censors and after approval the films were finally handed to the CPI for editing and distribution. Altogether the war films were closely controlled both in Europe and the United States.

Camera Technology

Motion picture cameras were hard to find. The Signal Corps tried to buy as many cameras available in the open market, but as late as December 1917 had only five working cameras. The Army at first took some Universal cameras to Europe and later bought additional Pathé cameras in France but these frequently broke down. A more reliable motion picture camera was needed that was light, sturdy and suitable for use in the trenches.



Figure 3: Lt. Edwin F. Weigle and Carl Akeley testing the "pancake camera" for the Signal Corps, December 1917.

Photo courtesy National Archives.

So the Signal Corps ordered additional motion picture cameras of a revolutionary nature made by explorer Carl E. Akeley in his own company in New York. The “Akeley Pancake Camera” changed camera design and technology significantly. Nicknamed “Pancake” for its odd rounded shape, the camera featured a gyroscopic pan/tilt head so it could tilt straight up while the viewfinder remained in a fixed position. Akeley placed two lenses on the front of the camera — one as a viewfinder, the other as the film lens. He coupled them together in a way that allowed simultaneous focusing, something unheard of at the time. The camera also allowed the operator to change film magazines in less than 15 seconds. According to *Scientific American*, the “pancake” was introduced by the Signal Corps as its standard motion picture camera. Its introduction may have partly been the result of James Barnes, first head of the Photographic Unit, who met and befriended Akeley when he was shooting his wildlife films in Africa.²¹

Camera technology may have improved in 1918 but conditions at the front were essentially unchanged. Insufficient lightning frequently made it impossible to record actual infantry engagements that usually took place shortly before dawn. The same problems that had confronted cameramen photographing the war in Europe when America was still neutral in the war had remained. Leon H. Caverly, the former newsreel cameraman for Universal who had become a cinematographer for the U.S. Marine Corps, reported from France that lighting conditions were so bad that it was pitch-dark by three-thirty. “Besides it rains and rains and rains with the result that we are knee deep in mud spelled with a capital letter. If ‘War is Hell’, as Sherman said, it should be fought in the tropics to carry out the proper idea of heat. Incidentally, lighting conditions would be greatly improved.”²²

In April 1918 the CPI sent Edward Hatrick to France as a special representative in order to report on the Signal Corps activities and any possibilities to improve motion picture coverage. As chief of photo syndication for Hearst’s International News Service and the one who set up Hearst’s newsreel organization, Hatrick knew what was needed to direct such an operation on this scale. He advised

placing a CPI liaison officer with the Signal Corps intelligence section permanently, so more pictures would be made that could be used specifically for publicity purposes. This would also make it possible to give Signal Corps cinematographers directions and advance knowledge on what subjects to record and where they should be. ²³

Conclusion

By the end of World War I, virtually from nothing, the Photographic Unit of the Signal Corps had become a remarkable powerhouse. At the time of the Armistice in November 1918, seven photographic field units of the U.S. Signal Corps were on duty in the combat zone on the Western Front, producing an impressive amount of film and still photographs.

According to K. Jack Bauer:

Beginning with 25 men in August 1917, the Photographic Section attached to the AEF reached a strength of 92 officers and 489 men in November 1918. A photographic unit consisting of one motion-picture cameraman and one still-picture photographer, with assistants, was assigned to each division in addition to other units attached to higher organizations, the Services of Supply, the sea transport service, and the various welfare organizations like the Red Cross and the Salvation Army. Cameramen in the AEF shot 589,197 feet of film, while film units in the United States filmed 277,173 feet of domestic scenes. In addition, the Signal Corps produced a 62,000 foot training film series called *Training of the Soldier* and a 16,000 foot aviation training film Entitled *Flightwings*.²⁴

And indeed, it is difficult to confront Record Group 111 at the National Archives, either on line or in person, without feeling overwhelmed. There is a huge amount of material still available, even considering the amount of film that was lost or destroyed. And much of it is excellent. It is easy to think that World War I material tended to be made of propaganda shots of subjects such as soldiers obviously being told to smile and give a thumbs up for the camera, and indeed there is

some of that. But a lot of the footage shows the truth about the war in all its gritty reality. It may not have been shown to civilians in newsreels back home, but the cameramen shot it, just as it was.

The Signal Corps also had an influence on post-war Hollywood. It attracted a number of cameramen who in later years became part of Hollywood film history. Ernest Schoedsack, Victor Fleming, Josef von Sternberg and Lewis Milestone were all in the Signal Corps, although Milestone, future director of *All Quiet on the Western Front*, never went to France and served as an assistant cameraman making instructional films for the Medical Corps in Washington.

The Signal Corps covered every aspect of the war, produced training films, histories of various campaigns, and four full-length documentaries which were shown widely in theaters in the United States. And with all the defects of the CPI, and they were many, its activities insured that combat photography in the United States would touch the heart of the civilians at home as well as train the military. In the European countries, in general, the military assumed increasing power over the dissemination of information as the war went on. In the United States, the CPI prevented this from happening. It was on this base that the magnificent World War Two documentary films of Frank Capra, John Huston, George Stevens, John Ford and William Wyler were founded.

About the Authors

Cooper C. Graham and Ron van Dopperen collaborate on World War I film history publications since 2011. Starting with a series of articles for *Film History* journal they co-authored *Shooting the Great War: Albert Dawson and the American Correspondent Film Company* in 2013, followed (together with James W. Castellan) by *American Cinematographers in the Great War* (2014) which was published by John Libbey and sponsored by the Pordenone Silent Film Festival. Their

work has also led to the restoration in 2015 of Wilbur H. Durborough's 1915 feature film *On the Firing Line with the Germans* by the Library of Congress.

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- ¹⁹ Earl Theissen, "The Photographer in the World War", *International Photographer* (November 1935) , 5.
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²² “Cameraman Writes from War Front”, *Motion Picture News* (12 January 1918): 264.

²³ As the CPI film program expanded during 1918, the instructions to military cameramen in the field also seem to have improved. In the collection of the National Archives the authors found a Signal Corps document with a number of suggestions on how to shoot good news and publicity scenes at the front. Download link available at: <https://drive.google.com/open?id=0B9ewwS1U0BkdTDBfYnBhbHRXV28>

²⁴ Bauer, 1.